



A.D. 1871, 31st May. N^o 1445.

S P E C I F I C A T I O N

OF

THOMAS HARRISON GRANGER
AND
JEAN PAUL LOUIS HYAN.

REMOVING SEWAGE GAS.

L O N D O N :

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO HER MAJESTY'S MOST EXCELLENT MAJESTY:
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1871.



A.D. 1871, 31st MAY. N° 1445.

Removing Sewage Gas.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by Thomas Harrison Granger and Jean Paul Louis Hyan at the Office of the Commissioners of Patents, with their Petition, on the 31st May 1871.

We, THOMAS HARRISON GRANGER & JEAN PAUL LOUIS HYAN, of 5 Berlin, in the Kingdom of Prussia, Manufacturers, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN THE MODE OF CARRYING AWAY THE REFUSE FROM SEWERS IN TOWNS AND MANUFACTURIES,” to be as follows:—

We cause the sewage gases to be led away by means of a partial vacuum in the smaller sewers into the main sewer, and conveyed through it to a place of treatment, so that instead of gases from the sewage issuing from the sewer openings in streets, sculleries, and closets, as at present, and thereby infecting the atmospheric air in streets, harbours, and houses, the scullery and closet openings are turned into exhausters and help to clear the air. The suction of the sewage gases to the place of treatment is caused by a chimney at the opening of the main sewer of about the same cross section as the sewer, there being a furnace in which the sewage gases are burnt, and the heat caused by their combustion establishes a strong draught in the chimney. In order to avoid

Granger & Hyan's Improved Method of Removing Sewage Gas.

the unnecessary suction of atmospheric air which would impair the strong draught in the system of sewers through the openings of the street sewers and the openings in closets and sculleries, all these openings are furnished with self-acting hermetic fastenings which are only opened when their respective pipes are to be used, and afterwards closed to 5 prevent the entrance of atmospheric air. The keys of the fastenings of the street sewers may be given to authorized persons, who can when required let the water into the sewers. We cause the waste steam of the working engine of the establishment for treating sewage to be let into the before-mentioned chimney by means of a blast pipe in order 10 to increase the draught in the sewers. In order not to be entirely dependent on draught to draw off the sewage gases we employ when required an air pump or blowing machine which draws the air out of the sewers and forces it through the grate of the furnace.

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1871.